

FIG. 1A

Met Leu Ala Arg Ala Leu Leu Leu Cys Ala Val Leu Ala Leu Ser His  
1 5 10 15  
Thr Ala Asn Pro Cys Cys Ser His Pro Cys Gln Asn Arg Gly Val Cys  
20 25 30  
Met Ser Val Gly Phe Asp Gln Tyr Lys Cys Asp Cys Thr Arg Thr Gly  
35 40 45  
Phe Tyr Gly Glu Asn Cys Ser Thr Pro Glu Phe Leu Thr Arg Ile Lys  
50 55 60  
Leu Phe Leu Lys Pro Thr Pro Asn Thr Val His Tyr Ile Leu Thr His  
65 70 75 80  
Phe Lys Gly Phe Trp Asn Val Val Asn Asn Ile Pro Phe Leu Arg Asn  
85 90 95  
Ala Ile Met Ser Tyr Val Leu Thr Ser Arg Ser His Leu Ile Asp Ser  
100 105 110  
Pro Pro Thr Tyr Asn Ala Asp Tyr Gly Tyr Lys Ser Trp Glu Ala Phe  
115 120 125  
Ser Asn Leu Ser Tyr Tyr Thr Arg Ala Leu Pro Pro Val Pro Asp Asp  
130 135 140  
Cys Pro Thr Pro Leu Gly Val Lys Gly Lys Lys Gln Leu Pro Asp Ser  
145 150 155 160  
Asn Glu Ile Val Glu Lys Leu Leu Leu Arg Arg Lys Phe Ile Pro Asp  
165 170 175  
Pro Gln Gly Ser Asn Met Met Phe Ala Phe Phe Ala Gln His Phe Thr  
180 185 190  
His Gln Phe Phe Lys Thr Asp His Lys Arg Gly Pro Ala Phe Thr Asn  
195 200 205  
Gly Leu Gly His Gly Val Asp Leu Asn His Ile Tyr Gly Glu Thr Leu  
210 215 220  
Ala Arg Gln Arg Lys Leu Arg Leu Phe Lys Asp Gly Lys Met Lys Tyr  
225 230 235 240  
Gln Ile Ile Asp Gly Glu Met Tyr Pro Pro Thr Val Lys Asp Thr Gln  
245 250 255  
Ala Glu Met Ile Tyr Pro Pro Gln Val Pro Glu His Leu Arg Phe Ala  
260 265 270  
Val Gly Gln Glu Val Phe Gly Leu Val Pro Gly Leu Met Met Tyr Ala  
275 280 285  
Thr Ile Trp Leu Arg Glu His Asn Arg Val Cys Asp Val Leu Lys Gln  
290 295 300

FIG. 1B

Glu His Pro Glu Trp Gly Asp Glu Gln Leu Phe Gln Thr Ser Arg Leu  
305 310 315 320

Ile Leu Ile Gly Glu Thr Ile Lys Ile Val Ile Glu Asp Tyr Val Gln  
325 330 335

His Leu Ser Gly Tyr His Phe Lys Leu Lys Phe Asp Pro Glu Leu Leu  
340 345 350

Phe Asn Lys Gln Phe Gln Tyr Gln Asn Arg Ile Ala Ala Glu Phe Asn  
355 360 365

Thr Leu Tyr His Trp His Pro Leu Leu Pro Asp Thr Phe Gln Ile His  
370 375 380

Asp Gln Lys Tyr Asn Tyr Gln Gln Phe Ile Tyr Asn Asn Ser Ile Leu  
385 390 395 400

Leu Glu His Gly Ile Thr Gln Phe Val Glu Ser Phe Thr Arg Gln Ile  
405 410 415

Ala Gly Arg Val Ala Gly Gly Arg Asn Val Pro Pro Ala Val Gln Lys  
420 425 430

Val Ser Gln Ala Ser Ile Asp Gln Ser Arg Gln Met Lys Tyr Gln Ser  
435 440 445

Phe Asn Glu Tyr Arg Lys Arg Phe Met Leu Lys Pro Tyr Glu Ser Phe  
450 455 460

Glu Glu Leu Thr Gly Glu Lys Glu Met Ser Ala Glu Leu Glu Ala Leu  
465 470 475 480

Tyr Gly Asp Ile Asp Ala Val Glu Leu Tyr Pro Ala Leu Leu Val Glu  
485 490 495

Lys Pro Arg Pro Asp Ala Ile Phe Gly Glu Thr Met Val Glu Val Gly  
500 505 510

Ala Pro Phe Ser Leu Lys Gly Leu Met Gly Asn Val Ile Cys Ser Pro  
515 520 525

Ala Tyr Trp Lys Pro Ser Thr Phe Gly Gly Glu Val Gly Phe Gln Ile  
530 535 540

Ile Asn Thr Ala Ser Ile Gln Ser Leu Ile Cys Asn Asn Val Lys Gly  
545 550 555 560

Cys Pro Phe Thr Ser Phe Ser Val Pro Asp Pro Glu Leu Ile Lys Thr  
565 570 575

Val Thr Ile Asn Ala Ser Ser Ser Arg Ser Gly Leu Asp Asp Ile Asn  
580 585 590

Pro Thr Val Leu Leu Lys Glu Arg Ser Thr Glu Leu  
595 600

**FIG. 2A**

GTCCAGGAAC TCCTCAGCAG CGCCTCCTTC AGCTCCACAG CCAGACGCCC TCAGACAGCA 60  
AAGCCTACCC CCGCGCCGCG CCCTGCCCGC CGCTGCGATG CTCGCCCGCG CCCTGCTGCT 120  
GTGCGCGGTC CTGGCGCTCA GCCATACAGC AAATCCTTGC TGTCCCACC CATGTCAAAA 180  
CCGAGGTGTA TGTATGAGTG TGGGATTGTA CCAGTATAAG TGGGATTGTA CCCGGACAGG 240  
ATTCTATGGA GAAAACTGCT CAACACCGGA ATTTTGTACA AGAATAAAAT TATTCTGAA 300  
ACCCACTCCA AACACAGTGC ACTACATACT TACCCACTTC AAGGGATTTC GGAACGTTGT 360  
GAATAACATT CCCTTCCTTC GAAATGCAAT TATGAGTTAT GTGTTGACAT CCAGATCACA 420  
TTTGATTGAC AGTCCACCAA CTTACAATGC TGAATATGGC TACAAAAGCT GGGAAAGCCTT 480  
CTCTAACCTC TCCTATTATA CTAGAGCCCT TCCTCCTGTG CCTGATGATT GCCCGACTCC 540  
CTTGGGTGTC AAAGGTAAAA AGCAGCTTCC TGATTCAAAT GAGATTGTGG AAAAATTGCT 600  
TCTAAGAAGA AAGTTCATCC CTGATCCCCA GGGCTCAAAC ATGATGTTTG CATTCTTTGC 660  
CCAGCACTTC ACGCACCAGT TTTTCAAGAC AGATCATAAG CGAGGGCCAG CTTTCACCAA 720  
CGGGCTGGGC CATGGGGTGG ACTTAAATCA TATTACGGT GAAACTCTGG CTAGACAGCG 780  
TAAACTGCGC CTTTCAAGG ATGGAAAAAT GAAATATCAG ATAATTGATG GAGAGATGTA 840  
TCCTCCACA GTCAAAGATA CTCAGGCAGA GATGATCTAC CCTCTCAAG TCCCTGAGCA 900  
TCTACGGTTT GCTGTGGGGC AGGAGGTCTT TGGTCTGGTG CCTGGTCTGA TGATGTATGC 960  
CACAATCTGG CTGCGGGAAC ACAACAGAGT ATGTGATGTG CTTAAACAGG AGCATCCTGA 1020  
ATGGGGTGAT GAGCAOTTGT TCCAGACAAG CAGGCTAATA CTGATAGGAG AGACTATTAA 1080  
GATTGTGATT GAAGATTATG TGCAACACTT GAGTGGCTAT CACTTCAAAC TGAAATTGA 1140  
CCCAGAACTA CTTTCAACA AACAATTCCA GTACCAAAT CGTATTGCTG CTGAATTAA 1200  
CACCTCTAT CACTGGCATC CCCTCTGCC TGACACCTTT CAAATTCATG ACCAGAAATA 1260  
CAACTATCAA CAGTTTATCT ACAACAATC TATATTGCTG GAACATGGAA TTACCCAGTT 1320  
TGTTGAATCA TTCACCAGGC AAATTGCTGG CAGGGTTGCT GGTGGTAGGA ATGTTCCACC 1380  
CGCAGTACAG AAAATATCAC AGGCTTCCAT TGACCAGAGC AGGCAGATGA AATACCAATC 1440  
TTTAAATGAG TACCGCAAAC GCTTTATGCT GAAGCCCTAT GAATCATTTG AAGAACTTAC 1500  
AGGAGAAAAG GAAATGTCTG CAGAATTGGA AGCACTCTAT GGTGACATCG ATGCTGTGGA 1560  
GCTGTATCCT GCCCTTCTGG TAGAAAAGCC TCGGCCAGAT GCCATCTTTG GTGAAACCAT 1620  
GGTAGAAGTT GGAGCACCAT TCTCCTGAA AGGACTTATG GGTAATGTTA TATGTTCTCC 1680  
TGCCTACTGG AAGCCAAGCA CTTTGGTGG AGAAGTGGGT TTTCAAATCA TCAACACTGC 1740

FIG. 2B

CTCAATTCAG TCTCTCATCT GCAATAACGT GAAGGGCTGT CCCTTTACTT CATTCAGTGT 1800  
TCCAGATCCA GAGCTCATTAA AACAGTCAC CATCAATGCA AGTTCTTCCC GCTCCGGACT 1860  
AGATGATATC AATCCACAG TACTACTAAA AGAACGGTCG ACTGAAGTGT AGAAGTCTA 1920  
TGATCATATT TATTTATTTA TATGAACCAT GTCTATTAAT TTAATTATTT AATAATATTT 1980  
ATATTAACT CCTTATGTTA CTTAACATCT TCTGTAACAG AAGTCAGTAC TCCTGTTGCG 2040  
GAGAAAGGAG TCATACTTGT GAAGACTTTT ATGTCACTAC TCTAAAGATT TTGCTGTTGC 2100  
TGTTAAGTTT GGAAAACAGT TTTTATTCTG TTTTATAAAC CAGAGAGAAA TGAGTTTGA 2160  
CGTCTTTTAA CTGGAATTTT AACTTATATT ATAAGGACGA AAGTAAAGAT GTTTGAATAC 2220  
TTAAACACTA TCACAAGATG CCAAAATGCT GAAAGTTTTT AACTGTCTGA TGTTTCCAAT 2280  
GCATCTTCCA TGATGCATTA GAAGTAACTA ATGTTTGAAA TTTTAAAGTA CTTTGGGTGA 2340  
TTTTCTGTC ATCAAACAAA ACAGGTATCA GTGCATTATT AAATGAATAT TTAAATTAGA 2400  
CATTACCACT AATTTCATGT CTACTTTTTA AAATCAGCAA TGAAACAATA ATTTGAAATT 2460  
TCTAAATTCA TAGGGTAGAA TCACCTGTAA AAGCTTGTTT GATTTCTTAA AGTTATTAAA 2520  
CTTGACATA TACCAAAAAG AAGCTGTCTT GGATTTAAAT CTGTAAATC AGATGAAATT 2580  
TTACTACAAT TGCTTGTTAA AATATTTTAT AAGTGATGTT CCTTTTTCAC CAAGAGTATA 2640  
AACCTTTTAA GTGTGACTGT TAAAACTTCC TTTTAAATCA AAATGCCAAA TTTATTAAGG 2700  
TGGTGGAGCC ACTGCAGTGT TATCTCAAAA TAAGAATATC CTGTTGAGAT ATTCCAGAAT 2760  
CTGTTTATAT GGCTGGTAAC ATGTAAAAAC CCCATAACCC CGCCAAAAGG GGTCCTACCC 2820  
TTGAACATAA AGCAATAACC AAAGGAGAAA AGCCCAAATT ATTGGTTCCA AATTTAGGGT 2880  
TTAACTTTT TGAAGCAAAC TTTTTTTAG CCTTGTGCAC TGCAGACCTG GTACTCAGAT 2940  
TTTGCTATGA GGTTAATGAA GTACCAAGCT GTGCTTGAAT AACGATATGT TTTCTCAGAT 3000  
TTTCTGTTGT ACAGTTTAAAT TTAGCAGTCC ATATCACATT GCAAAAGTAG CAATGACCTC 3060  
ATAAAATACC TCTTCAAAAT GCTTAAATTC ATTTACACA TTAATTTTAT CTCAGTCTTG 3120  
AAGCCAATTC AGTAGGTGCA TTGGAATCAA GCCTGGCTAC CTGCATGCTG TTCCTTTTCT 3180  
TTTCTTCTT TAGCCATTTT GCTAAGAGAC ACAGTCTTCT CAAACACTTC GTTCTCCTA 3240  
TTTTTTTTTA CTAGTTTAA GATCAGAGTT CACTTCTTTT GGACTCTGCC TATATTTTCT 3300  
TACCTGAAT TTTGCAAGTT TTCAGGTAAA CCTCAGCTCA GGACTGCTAT TTAGCTCCTC 3360  
TTAAGAAGAT TAAAAAAGG 3387